## EUPHORBIA PSEUDOGLOBOSA Marloth.

(With Plate XIX.)

By Dr. John Muir and Professor R. H. Compton.

Euphorbia pseudoglobosa was published as a new species by the late Dr. R. Marloth in South African Gardening, XIX, 191, 1929, the type specimens being Muir 4089 from near Krombeks River, Riversdale District. Marloth stated that he had only seen male specimens, and his description applies only to that sex: a photograph of a male plant accompanies the description. A copy of Marloth's photograph is reproduced herewith (Plate XIX, fig. 1).

In 1933 there remained only a single plant of the original gathering, *Muir* 4089, this being fortunately a female. It was then photographed and a description was made. Cuttings were taken from it for propagation (they grew well but were later destroyed by a servant), and the remainder of the plant was dried and deposited in the National Herbarium, Pretoria. The photograph of this female plant is reproduced as Plate XIX, fig. 2. The following is the description, made (by J.M.) from the living plant.

## Euphorbia pseudoglobosa, Marloth (Euphorbiaeeae-Euphorbieae).

Main stem underground, cylindrical or slightly tapering. Branches jointed, dimorphie, the younger globose, the older oblong and elongated, unarmed, glabrous; at first buried flush with ground, 5—6-angled, producing later 2—3 globular or nearly spherical joints also mostly 5-angled, from 10—15 mm. in diameter; the older branches 16—20 mm. thick and up to 42 mm. long, 5 or often 7 angled; all dull green, tessellately tuberculate with blunt flattish tubercles. Leaves succulent, sessile, lanceolate or ovato-lanceolate, acute, ciliate, 1—1·5 mm. long, green becoming reddish on margins, soon withering leaving a whitish scar at first red-margined. Peduncles 2—7 at ends of branches, about 1 mm. long bearing three oblong, truncate bracts which are minutely ciliate, pubescent internally, slightly keeled towards apex and cuspidate, green or slightly red tinged, and one or two smaller lower bracts the latter soon withering. Cyathium 1·5 mm. long, 2·5—3 mm. broad, glabrous.

Glands 5, transversely oblong, 1.5 mm. in long diameter, green, entire, erecto-patent, contiguous, finely pitted and rugulose. Lobes of involucre 0.75 mm. broad, fringed, pale yellow. Styles stout, exserted, green, 2 mm. long, united for  $\frac{1}{2}$  their length, with three spreading channelled tips which are bifid at apex; stigmas and tips yellowish. Ovary green, shortly pedicellate, ovoid, glabrous, not exserted.

Flowering August—September. Does not belong to § Dactylanthes.

In cultivation the globular shape of the lateral stems is somewhat lost, a more cylindrical form being produced: this is noticeable as between the photograph of the male plant taken in 1929 and that of the female plant taken in 1933.

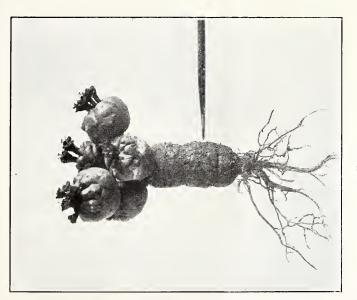
E. pseudoglobosa shows a certain resemblance to the recently described E. juglans Compton (Journ. S.A. Bot., I, 127, 1935). The latter has a relatively more massive root and the lateral stems are 6—9-angled, whereas the former has a smaller root and the lateral stems are 5—7-angled and tend to branch secondarily. There are also floral differences which are summarised in the following table:—

	E. juglans.	E. pseudoglobosa.
Male Plant Involucre	3 mm. long	2 mm. long
	3 mm. diam.	4 mm. diam.
	pubescent	glabrous
Peduncle	4-6 mm. long	2·5 mm. long
Ovary	present (rudimentary)	absent
Inflorescence	of 1—2 cyathia	simple
Female Plant Involucre	1 · 5 — 2 · 0 mm. long	1·5 mm. long
	1.5—2.0 mm. diam.	2 · 5 — 3 · 0 mm. diam.
	pubescent	glabrous
Styles	joined at base	joined for half their length

Both *E. juglans* and *E. pseudoglobosa* have been grown for several years at Kirstenboseh and at Whitehill, where they have maintained their distinctness. Another somewhat similar species is *E. pyriformis*, N.E. Br., described from a single male specimen from an unknown locality eultivated in England, of which a Uitenhage plant grown at Whitehill (*Archer* 245) is probably an example. Other related but distinct plants are an undescribed species from Touws River grown at Whitehill, and *Muir* 6593 from an unknown locality.







F1G. 1.

Plate XIX. Euphorbia pseudoglobosa.

Fig. 1. Photograph by the late Dr. Marioth of a male plant of Muir 4089 (Untouched).

Fig. 2. Photograph by Dr. Muir of a female plant of Muir 4089 from garden, 6 August, 1933.